

## CMOS VARACTOR WITH CONSTANT $dC/dV$ CHARACTERISTIC

### Abstract

5 A varactor is formed with a semiconductor junction having a retrograde dopant concentration profile in a depletion region. The retrograde dopant concentration profile results in an approximately linear capacitance/voltage characteristic response of the varactor. The retrograde dopant concentration profile also enables a peak of the dopant concentration to function as a low resistance conductive path connecting to the varactor.

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